

Notice of Allowability

Application No.

10/804,564

Applicant(s)

NISHIOKA ET AL.

Examiner

William J. Klimowicz

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment & response filed on Nov. 7, 2006.
2. ☒ The allowed claim(s) is/are 1-28.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


WILLIAM KLIMOWICZ
PRIMARY EXAMINER

REASONS FOR ALLOWANCE

In view of the Applicant's arguments and claim amendments presented in a response filed November 7, 2006, the Examiner has been persuaded that the claims previously rejected, are in fact allowable.

The prior art of record fails to fairly, teach, show or suggest, by either anticipating or rendering obvious, the invention as set forth in the claims of the instant application.

Furthermore, an update of a search previously made does not detect the combined claimed elements as set forth in the pending claims. Additionally, the reasons for allowance of the claims over the prior art of record is believed to be clear from the prosecution history taken as a whole, in view of the previous rejections based on the applied prior art, supplemented by the reasons espoused by the Applicant in the Response filed on November 7, 2006, as to why the prior art fails to read on the claims of record. In view of the arguments and claim amendments presented therein, the Examiner has determined that the scales of patentability, based on the preponderance of the evidence, tip slightly in favor of the Applicant. That is, based on a preponderance of the evidence, the Applicant's arguments, the application of the art, and the record as a whole, the claims as presently amended obviate rejections previously made by the Examiner, and as such the previous rejections are more likely than not, unsustainable, for the reasons articulated by the Applicant's response filed on November 7, 2006.

Additionally, it is noted on page 11 of the Response filed on November 7, 2006, the Applicant states:

Nakazawa discloses a method of annealing layers by impressing magnetic fields in two opposite directions and intersecting the easy axis of a free layer and the easy axis of a pinned layer. In order for the intersection of these two layers to occur, Nakazawa impresses a magnetic field with an annealing temperature of 210-250° for first annealing and 150-250° for second annealing. In contrast, embodiments of claim 27 conduct the two magnetic applying steps at room temperature in order to magnetize the two pinned layers. The annealing temperature used by the Nakazawa Patent are markedly higher than room temperature and therefore can not teach or suggest this element of amended claim 27. Support for claim 27 may be found in the specification as originally filed, at least at paragraphs [0020], [0021], [0201], and [0321].

The “paragraphs [0020], [0021], [0201], and [0321]” in the last sentence of the Applicant’s statement above, are paragraph numbers associated with the PGPub of the application 10/804,564 (i.e., USPGPub No. 2004/0246632 A1) published on December 9, 2004. The corresponding paragraphs equate to [0016], [0017], [0090] and [0139], respectively, of the specification of 10/804,564. Moreover, it is noted that the specification defines “room temperature” as being “about 20°C” - see page 23, paragraph [0087] of Applicant’s specification, and also Figure 3a of Applicant’s specification.

Moreover, it is noted that the claim language designator “.sub.” denotes a subscript, the claim language designator “.ltoreq.” denotes \leq (less than or equal to), the claim language designator “.gtoreq.” denotes \geq (greater than or equal to) and the claim language designator “.ANG.” denotes the unit of length Å (Angstroms).

Conclusion

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

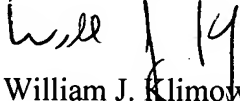
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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (703) 305-3452. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William J. Klimowicz
Primary Examiner
Art Unit 2652

WJK